Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of measuring conveyor belt elongation, wherein when the elongation of a running conveyor belt is measured, a magnetic field from a plurality of rubber magnets embedded in the conveyor belt is detected by a magnetism sensor provided so that the displacement in the conveyor belt length direction is restrained, and the elongation of conveyor belt is determined from temporal variations in the detected magnetic field.

2. (Original) The method of measuring conveyor belt elongation according to claim 1, wherein the elongation ε of conveyor belt is determined from Equation (1) of

$$\varepsilon = ((v \cdot ta - d)/d) \times 100(\%) \quad (1)$$

where, ta is a time interval between two peaks appearing in the temporal variations in magnetic field detected by the magnetism sensor, v is a surface speed of conveyor belt, which is measured by a separate means, and d is a separation distance between the two peaks measured by relatively displacing the magnetism sensor in the conveyor belt length direction in a state in which the conveyor belt elongation is zero.

3. (Currently Amended) An apparatus for measuring conveyor belt elongation, which is used in the method of measuring conveyor belt elongation described in claim 1 ~~or 2~~, wherein the apparatus comprises a plurality of rubber magnets embedded so as to be arranged in the conveyor belt length direction; a magnetism sensor, which is provided so that the displacement in the conveyor belt length direction is restrained, for detecting a magnetic field from the

rubber magnet; and a belt speed measuring means for measuring the surface speed of a conveyor belt, and

the plurality of rubber magnets are arranged so that the direction of magnetic poles intersects at right angles to the surface of conveyor belt, and is opposite between the adjacent rubber magnets.

4. (Original) The apparatus for measuring conveyor belt elongation according to claim 3, wherein a width direction guide for regulating the position of conveyor belt in the widthwise direction is provided on both sides in the belt width direction of the magnetism sensor.

5. (Currently Amended) The apparatus for measuring conveyor belt elongation according to claim 3 ~~or 4~~, wherein the plurality of rubber magnets are provided in the vicinity of a joint portion extending in the widthwise direction of a reinforcing material constituting the conveyor belt.

6. (Currently Amended) The apparatus for measuring conveyor belt elongation according to claim 3 ~~any one of claims 3 to 5~~, wherein the belt speed measuring means is formed by a means for measuring the rotational speed of a pulley around which the conveyor belt is set.

7. (Original) A method of measuring conveyor belt wear extent, wherein when the wear extent of the surface of a running conveyor belt is measured, a magnetic field from a rubber magnet which is provided in a desired portion of conveyor belt and a part of which is exposed on the conveyor belt surface is detected by a magnetism sensor fixed to the earth, and the wear extent of conveyor belt is determined from the magnitude of the detected magnetic field by utilizing a phenomenon that the magnetic field is varied by a decrease in volume of rubber

magnet caused by the progress of wear of the desired portion of conveyor belt.

8. (Original) An apparatus for measuring conveyor belt wear extent, which is used in the method of measuring conveyor belt wear extent described in claim 7, wherein the apparatus comprises a rubber magnet provided in a desired portion of a conveyor belt and a magnetism sensor for detecting a magnetic field from the rubber magnet, the rubber magnet is arranged so that the magnetic poles are directed in the belt thickness direction, and one magnetic pole is exposed on the conveyor belt surface.

9. (Original) The apparatus for measuring conveyor belt wear extent according to claim 8, wherein a width direction guide for regulating the position in the widthwise direction of a conveyor belt portion passing through a position close to the magnetism sensor is provided.

10. (Original) A method of measuring conveyor belt temperature, wherein when the temperature of a running conveyor belt is measured, a magnetic field from a temperature-sensitive rubber compound magnet embedded in a desired portion of conveyor belt is detected by a magnetism sensor fixed to the earth, and the temperature of conveyor belt is determined from the magnitude of the detected magnetic field by utilizing the phenomenon that the magnetic field varies depending on the temperature of the desired portion.

11. (Original) An apparatus for measuring conveyor belt temperature, which is used in the method of measuring conveyor belt temperature according to claim 10, wherein the apparatus comprises a temperature-sensitive rubber compound magnet which is embedded in a desired portion of conveyor belt and has magnetic poles of reverse polarity at both ends and a magnetism sensor for detecting a magnetic field from the temperature-sensitive rubber

compound magnet, and

the temperature-sensitive rubber compound magnet has a property that a magnetic force varies in accordance with temperature variations in the predetermined temperature range.

12. (Currently Amended) The apparatus for measuring conveyor belt temperature according to claim 11, wherein the temperature-sensitive rubber compound magnet consists of a permanent magnet and a temperature-sensitive magnetic body connected to one magnetic pole of the permanent magnet so as to extend the permanent magnet, the temperature-sensitive magnetic body having a property that the permeability decreases as the temperature rises in the temperature range, and

the permanent magnet and the temperature-sensitive magnetic body are formed by a bond magnetic body formed by mixedly dispersing magnetic particles into a rubber.

13. (Original) The apparatus for measuring conveyor belt temperature according to claim 11, wherein the temperature-sensitive rubber compound magnet consists of a permanent magnet and a temperature-sensitive magnetic body arranged around the permanent magnet, the temperature-sensitive magnetic body having a property that the permeability decreases as the temperature rises in the temperature range, and

the permanent magnet and the temperature-sensitive magnetic body are formed by a bond magnetic body formed by mixedly dispersing magnetic particles into a rubber.

14. (Currently Amended) The apparatus for measuring conveyor belt temperature according to claim 11 ~~any one of claims 11 to 14~~, wherein a width direction guide for regulating the position in the widthwise direction of a conveyor belt portion passing through a position closest to the magnetism sensor is provided.

15. (Currently Amended) The apparatus for measuring conveyor belt temperature according to claim 11 ~~any one of claims 11 to 15~~, wherein the magnetism sensor is provided in the vicinity of the downstream side in the conveyor belt running direction of a charging portion in which objects to be conveyed are charged.

16.-29. (Canceled)